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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/451,286	11/30/1999	James Wichelman	10001187	8833

22878 7590 02/09/2005

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EXAMINER

RAMAN, USHA

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/451,286

Applicant(s)

WICHELMAN ET AL.

Examiner

Usha Raman

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 September 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-15 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Response to Arguments***

1. Applicant's arguments filed September 10<sup>th</sup>, 2004 have been fully considered but they are not persuasive. Applicant argues that Chappell's testing is not automated because the testing is a direct result of a field technician request for ingress testing. Examiner however asserts that Chappell's teaches the step of "automated channel testing", because Chappell teaches the ingress modem taking measurements of the upstream signal at different frequencies, until the stop frequency is reached, thereby testing a plurality of channels, automatically under the operation of the controller. See column 6, lines 14-17, column 13, lines 31-36.

Examiner notes applicant's arguments in page 9 regarding Anderson and Kekic. However, contrary to what the applicant argues, the examiner does not rely on the protocol management teachings of the Anderson and Kekic references. The examiner relies on Kekic for taking a measurement of series of events, and monitoring the measured values for certain threshold levels and indicating the occurrences of those events to the user. For example, Kekic teaches monitoring a series of events for certain degrading conditions and indicating the occurrence of those events as alarming or critical conditions. Note column 5, lines 59-67 and column 6, lines 1-17. The examiner relies on the Anderson reference to indicate to a user on a graphical display, a statistics in the percent format display, instead of displaying plurality of measured values to the user. Note Anderson: column 13, lines 29-37.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chappell (US Pat. 6,425,132) in view of Kekic et al. (US Pat. 6,272,537) and in further view of Anderson et al. (US Pat. 5,850,388).

In regards to claims 1, 6 and 11, Chappell discloses a device that performs a spectral analysis of a node coupled to a cable head-end. The head end comprises a plurality of nodes that provide the cable services (a plurality of channels) from the head end to a plurality of subscribers. Therefore the Chappell's system comprises one group (being the head end), of number of nodes, each node having a number of channels (frequencies). The local interface performing the testing of network performance is the ingress modem. The ingress modem comprises a micro-controller (processor) coupled to the ingress modem, which comprises a program memory for storing software routines to be executed by the controller, and a display (110) coupled to the controller (and therefore to the local interface, the ingress modem). Chappell's system tests the channels by the use of a frequency sweep on a particular node to detect anomalies at a channel of that node, and display it to the display device, i.e. the ingress modem measures signals at different frequencies, until a stop

frequency is reached, thereby testing a plurality of channels, automatically under the operation of the controller. Note abstract, column 1, lines 30-34, column 2, lines 43-64, column 3, lines 2-9, column 4, lines 27-30, lines 50-53, column 6, lines 14-17, lines 30-46 and column 13, lines 31-36 of Chappell.

Chappell teaches a graphical user interface for displaying the spectral analysis of the measurements, but lacks warning interface logic for generating a channel percent advisory upon the occurrence of an advisory event within the channel level; and generating a channel critical alarm indicator upon the occurrence of a critical channel event.

Kekic teaches the step of his principle of logging events and detecting different levels of alarming network conditions in an analyzer for any communication network and indicating it in a display. Specifically Kekic teaches indicating warning, and critical alarm status to indicate the (degrading or faulty) state of a network based on sequence of events. A series of events that cause a warning status to be triggered constitutes the advisory indication, while the series of events that cause a alarm status to be triggered constitutes the "critical" alarm indication as indicated in figure 6B. Note figure 3B and descriptions in column 18, lines 33-57, column 21, lines 50-67, table 3 in column 22, lines 1-15, and column 76, lines 44-48 of Kekic.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Chappell with the teachings of Kekic, by implementing a warning and critical alarm status indicators that can be triggered

upon the occurrence of a series of advisory events and critical events. The motivation would be to monitor network conditions in order to inform to a user what the results of the spectral analysis mean, thereby informing them of a continually degrading or faulty network.

The modified system of Chappell in view of Kekic lacks indicating a percent advisory for warnings.

Anderson teaches displaying various measured network statistics in a plurality of different formats including graphs, as well as a percentage format. Note figures 18-20 and description in column 24, lines 14-42 of Anderson et al.

It would have been obvious to one of ordinary skill to represent the warning indicator in a percent format to indicate to the user the percent offset (rather than measured values) of the network fault, thereby showing the users some meaningful results regarding quality of service.

In regards to claim 3, 5, 8, 10, 13 and 15, Chappell indicates that upon performing a test on the network, a node performance as well as channel status can be tested to locate an anomaly to a particular channel on the node. Note column 5, lines 59-67 and column 6, lines 1-17. It would have been obvious to apply the same modifications of the analyzer from the channel level to the node level in the modified system of Chappell in view of Kekic and Anderson to include a node percent advisory and a node critical alarm means, in order to create monitor node-level conditions of a network.

In regards to claims 2, 4, 7, 9, 12, and 14, Anderson teaches displaying the performance statistics of a individual node on a network, or the performance stats of the entire (group) network. Note column 13, lines 29-37. It would have been obvious to further modify the system of Chappell in view of Kekic and Anderson to include a collective network performance statistics in addition to channel and node performance stats, as taught by Anderson, to indicate the status of the entire network after the occurrence of a series of events.

#### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (703) 305-0376. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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02-04-05

  
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